



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

**APR 26 2001**

DOT-E 12396  
(FIRST REVISION)

EXPIRATION DATE: June 30, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: United Space Alliance  
Houston, TX

(See Appendix A to this document for a list of additional grantees)

2. PURPOSE AND LIMITATION:

- a. This exemption authorizes the transportation in commerce of nitrogen gas in certain non-DOT specification cylinders. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
- b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.34(d) in that the cylinder is not equipped with a pressure relief device; and §§ 173.302(a) and 175.3 in that a non-DOT specification cylinder is not authorized, except as described herein.

5. BASIS: This exemption is based on the application of United Space Alliance (USA) dated December 10, 1999, and additional information dated July 19, 2000 submitted in accordance with § 107.105 and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

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Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Nitrogen, compressed	2.2	UN1066	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings prescribed are non-DOT specification cylinders which are part of the Simplified Aid For Extra-vehicular Activity Rescue (SAFER) assembly described in USA's application on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA).

(1) Each cylinder is a filament-wound carbon fiber reinforced stainless steel lined pressure vessel. The liner must be made of type 304L stainless from a configuration of 2 seamless hemispherical domed heads containing integral bosses circumferentially welded to form a cylinder. The overwrap must be T-1000 carbon graphite fiber with a REZ100 epoxy resin. The cylinder must comply with all NASA standards and specifications relating to SAFER, on file with the OHMEA. The nominal volumetric capacity of the cylinder is approximately 170 cubic inches with a rated service pressure of 8,000 psi at 70°F. The cylinder is not equipped with safety relief devices.

(2) Only 6 cylinders are authorized to be used under the terms of this exemption.

b. OPERATIONAL CONTROLS - The pressurized cylinders may only be shipped, installed in the SAFER assembly, in the container as described in the United Space Alliance application on file with OHMEA.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

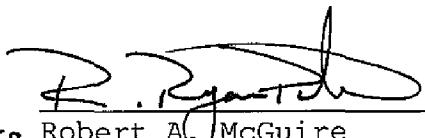
- b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.
  - c. The cylinder is only authorized 15 years from the date of manufacture or 100 pressurizations, whichever occurs first.
  - d. The cylinders must be used exclusively as a component of the space shuttle program.
  - e. Each cylinder must be shipped in strong outside packagings in accordance with § 173.301(k).
  - f. MARKING - The SAFER shipping container must be marked "DOT-E 12396" on two opposite sides in letters at least 2 inches in height on the contrasting background.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo aircraft only.
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each aircraft or motor vehicle used to transport packages covered by this exemption. The shipper must furnish a copy of this exemption to the air carrier before or at the time the shipment is tendered.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when this exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:

  
for Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

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(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.  
Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

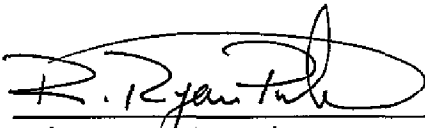
Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, S.W., Washington, DC 20590-0001, Attention: Records Center, 202-366-5046.

PO: KFW

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The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

Company Name City/State	Application Date	Issue Date	Expiration Date
National Aeronautics and Space Administration Houston, TX	Mar 21, 2001	APR 26 2001	Jun 30, 2002

  
for Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety